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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/559,727

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Hiroyuki Nijima

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EXAMINER

MANDEVILLE, JASON M

ART UNIT

PAPER NUMBER

2629

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DELIVERY MODE

10/17/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/559,727

Applicant(s)

NIIJIMA, HIROYUKI

Examiner

Jason M. Mandeville

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 07 December 2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. **Claim 5** is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. **Claim 5** recites a command input device comprising a "vibration detection means for detecting vibration." However, the "vibration detection means" is not sufficiently described in the specification to enable one of ordinary skill in the art at the time when the invention was made to implement this "vibration detection means" in the command input device. The specification implies that the "vibration detection means" is implemented as a switch to trigger a response from an "erroneous operation preventing means" (see Page 18, Ln. 22 through Page 20, Ln. 13). The specification further implies that the "vibration detection means" is intended to detect the vibrations of a moving vehicle in which the command input device is installed. However, the nature of the vibrations being detected is not explained in the specification. Further, there is no clear distinction between the operation of the "vibration detection means" and the

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operation of the contact time detection means and the input determination means in implementing the erroneous operation preventing means. As such, it is unclear what level of experimentation is necessary in order to implement the "vibration detection means" in the control input device.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claim 5** is further rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Again, **Claim 5** recites a command input device comprising a "vibration detection means for detecting vibration." However, the "vibration detection means" is not sufficiently described in the specification to allow one of ordinary skill in the art at the time when the invention was made to implement this "vibration detection means" in the command input device. The specification implies that the "vibration detection means" is implemented as a switch to trigger a response from an "erroneous operation preventing means" (see Page 18, Ln. 22 through Page 20, Ln. 13). The specification further implies that the "vibration detection means" is intended to detect the vibrations of a moving vehicle in which the command input device is installed. However, the nature of the vibrations being detected is not explained in the specification. Further, there is no clear distinction between the operation of the "vibration detection means" and the operation of the contact time detection means and

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the input determination means in implementing the erroneous operation preventing means. As such, the specification does not provide sufficient written description of the "vibration detection means" and **Claim 5** is vague and indefinite.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. **Claims 1-4 and 6-8** are rejected under 35 U.S.C. 102(b) as being anticipated by Gillespie et al. (hereinafter "Gillespie" US 2003 / 0112228).

7. As pertaining to **Claim 1**, Gillespie discloses (see Fig. 1) a command input device (6) comprising (see Page 5, Para. [0083]-[0085]):

contact time detection means (implicit in (20); see (280) of Fig. 14) for detecting a time period (i.e., a duration) for which a finger or a pen is in continual contact with a touch panel display (10; see Page 3, Para. [0039]; also see Page 19, Para. [0261] and Para. [0268]-[0272], and Page 20, Para. [0274]-[0275]; in addition, see Fig. 15A-15E and Page 20, Para. [0276] through Page 22, Para. [0299] for an example implementation of the contact time detection means);

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contact number detection means (implicit in (20); again, see (280) of Fig. 14) for detecting the number of times the finger or the pen touched the touch panel display (10; again, see Page 3, Para. [0039]; also see Page 19, Para. [0261] and Para. [0268]-[0272], and Page 20, Para. [0274]-[0275]; in addition, see Fig. 15A-15E and Page 20, Para. [0276] through Page 22, Para. [0299] for an example implementation of the contact number detection means);

contact interval detection means (implicit in (20); see (280) of Fig. 14) for detecting a time period between when the finger or the pen is detached from the touch panel display (10) and when the finger or the pen is brought into contact therewith afterwards (again, see Page 3, Para. [0039]; also see Page 19, Para. [0261] and Para. [0268]-[0272], and Page 20, Para. [0274]-[0275]; in addition, see Fig. 15A-15E and Page 20, Para. [0276] through Page 22, Para. [0299] for an example implementation of the contact interval detection means);

input determination means (implicit to (20); see (280) of Fig. 14) for determining an input command (i.e., a decoding of a gesture associated with a control function) based on the detection results obtained from the contact time detection means (implicit to (280)), the contact number detection means (implicit to (280)), and the contact interval detection means (implicit to (280); again, see Page 3, Para. [0039]; also see Page 19, Para. [0261] and Para. [0268]-[0272], and Page 20, Para. [0274]-[0275]; in addition, see Fig. 15A-15E and Page 20, Para. [0276] through Page 22, Para. [0299] for an example implementation of the input determination means);

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operation selection means (286; see Fig. 14) for selecting, among predetermined operations (i.e., control functions), an operation (i.e., control function) associated with the input command (i.e., the command decoded from the contact time, contact number, and contact interval detection means) based on the input command determined by the input determination means (280; see Page 19, Para. [0261]-[0271]; also see Page 20, Para. [0274]-[0275]; in addition, see Fig. 15A-15E and Page 20, Para. [0276] through Page 22, Para. [0299] for an example implementation of the operation selection means); and

operation control means (i.e., a host display or screen or processor; see Page 3, Para. [0039]) for executing the operation selected by the operation selection means (286; again, see Page 19, Para. [0261] and Para. [0268]-[0272], and Page 20, Para. [0274]-[0275]; in addition, see Fig. 15A-15E and Page 20, Para. [0276] through Page 22, Para. [0299] for an example implementation of the operation control means).

8. As pertaining to **Claim 2**, Gillespie discloses that the detection result obtained from the input determination means (implicit to (20); see (280) of Fig. 14) is unaffected by a contact position of the finger or the pen on the touch panel display (10; i.e., the entire display is sensitive to contact; see Fig. 2A-2D and Page 6, Para. [0086]-[0096]; see Page 19, Para. [0261] and Para. [0268]-[0272], and Page 20, Para. [0274]-[0275]).

9. As pertaining to **Claim 3**, Gillespie discloses (see Fig. 1, Fig. 14, and Fig. 15A-15E) that the command input device (6) further comprises input combination

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setting means (implicit to (20); see (280, 286) of Fig. 14) for arbitrarily setting association relationships (i.e., for combining the results of the detections and relating these results to an input command) between the detection results obtained from the contact time detection means (implicit to (280)), the contact number detection means (implicit to (280)), and the contact interval detection means (implicit to (280)) and the input command (i.e., the command decoded from the contact time, contact number, and contact interval detection means) determined, based on the detection results, by the input determination means (implicit to (20); see (280) of Fig. 14; see Page 19, Para. [0264]-[0267]; various gestures or input commands can be determined by arbitrarily setting the relationships between the detection results and their mapping to the input commands).

10. As pertaining to **Claim 4**, Gillespie discloses (see Fig. 1, Fig. 14, and Fig. 15A-15E) that the command input device (6) further comprises operation setting means (implicit to (20); see (280, 286) of Fig. 14) for arbitrarily setting association relationships (i.e., for combining the results of the detections and relating these results to an input command) between the input command (i.e., the command decoded from the contact time, contact number, and contact interval detection means) determined by the input determination means (implicit to (20); see (280) of Fig. 14) and the operation selected (i.e., the control function performed), based on the input command (i.e., the command decoded from the contact time, contact number, and contact interval detection means), by the operation selection means (286; see Fig. 14; see Page 19,

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Para. [0264]-[0267]; various operations can be performed by defining the relationship between an input command and an operation).

11. As pertaining to **Claim 6**, Gillespie discloses (see Fig. 15A-15E) that the contact time detection means (implicit in (20); see (280) of Fig. 14) distinguishes between two or more states (i.e., two or more gestures) in accordance with the time length of continual contact (i.e., the duration of contact; see Page 3, Para. [0039]; also see Page 19, Para. [0261] and Para. [0268]-[0272], and Page 20, Para. [0274]-[0275]; in addition, see Page 20, Para. [0276] through Page 22, Para. [0299] for an example implementation of the contact time detection means).

12. As pertaining to **Claim 7**, Gillespie discloses (see Fig. 15A-15E) that the contact time detection means (implicit in (20); see (280) of Fig. 14) is capable of arbitrarily setting a length by which the time period (i.e., duration) of continual contact is distinguished (again, see Page 3, Para. [0039]; also see Page 19, Para. [0261] and Para. [0268]-[0272], and Page 20, Para. [0274]-[0275]; in addition, see Page 20, Para. [0276] through Page 22, Para. [0299] for an example implementation of the contact time detection means).

13. As pertaining to **Claim 8**, Gillespie discloses (see Fig. 15A-15E) that the contact interval detection means (implicit in (20); see (280) of Fig. 14) is capable of arbitrarily setting a time period (i.e., duration) for a command input to be ended (again, see

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Page 3, Para. [0039]; also see Page 19, Para. [0261] and Para. [0268]-[0272], and Page 20, Para. [0274]-[0275]; in addition, see Page 20, Para. [0276] through Page 22, Para. [0299] for an example implementation of the contact interval detection means).

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. **Claim 5** is rejected under 35 U.S.C. 103(a) as being unpatentable over Gillespie in view of Akio Kikuchi et al. (hereinafter "Kikuchi" JP-62-187925).

16. As pertaining to **Claim 5**, Gillespie discloses the command input device according to Claim 1. However, Gillespie does not explicitly disclose that the command input device comprises vibration detection means for detecting vibration; and erroneous operation preventing means for preventing a chattering effect (i.e., inadvertent tapping) when the finger or the pen touches the touch panel, wherein a time interval between contacts of the finger or the pen determined, by the erroneous operation preventing

means, as chattering varies based on the detection result obtained from the vibration detection means.

Kikuchi discloses (see Fig. 1 and Fig. 2) a command input device (40) comprising a vibration detection means (30) for detecting vibration (see Abstract); and erroneous operation preventing means (implicit to the operation of touch panel (40)) for preventing a chattering effect (i.e., inadvertent tapping) when the finger or the pen touches the touch panel (40; see Abstract), wherein a time interval between contacts of the finger or the pen determined, by the erroneous operation preventing means, as chattering varies based on the detection result obtained from the vibration detection means (30; again, see Abstract). The inventions of Gillespie and Kikuchi are in the same field of endeavor. Further, both Gillespie and Kikuchi disclose touch panels for detecting signals generated by the touch of a finger and for detecting the position of a finger on the touch panel. As such, it would have been obvious to one of ordinary skill in the art at the time when the invention was made to combine the teachings of Gillespie and Kikuchi. As such, it would have been obvious to one of ordinary skill in the art that the touch control device of Gillespie could comprise the vibration detection means of Kikuchi wherein a time interval between contacts of the finger or the pen determined by the erroneous operation preventing means as chattering varies based on the detection result obtained from the vibration detection means.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Zetts (US 5,404,458) discloses a touch screen that utilizes timing control.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Mandeville whose telephone number is 571-270-3136. The examiner can normally be reached on Monday through Friday 7:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Eisen can be reached on 571-272-7687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Jason Mandeville

Examiner

09 October 2007

JMM

A handwritten signature in black ink, appearing to read "Alexander Eisen", written in a cursive style.

ALEXANDER EISEN
SUPERVISORY PATENT EXAMINER